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Attorney Docket No.: 045636-5054 Application No.: Unassigned

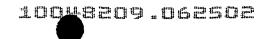
- 12. A peptide selected from the group of consisting of $Y_1KQYTSIHHGY_0$ (SEQ ID NO: 2), $Y_1KKQYTSIHHGY_0$ (SEQ ID NO: 3) and $Y_1KKKQYTSIHHGY_0$ (SEQ ID NO: 4), in which Y_0 is null or represents V, VV, VVE VVEV or VVEVD and Y_1 represents an internalization and addressing peptide corresponding to the sequence $X_1X_2X_3X_4X_5X_6X_7X_8X_9X_{10}X_{11}X_{12}X_{13}X_{14}X_{15}X_{16}$, in which $X_1X_2X_3X_4X_5X_6X_7X_8X_9X_{10}X_{11}X_{12}X_{13}X_{14}X_{15}$ and X_{16} each represent an α -amino acid, 6 to 10 of said amino acids being hydrophobic and X_6 representing a tryptophan.
- 13. The peptide as claimed in claim 12, wherein the sequence Y₁ corresponds to the sequence KQIKIWFQNRRMKWKK (SEQ ID NO: 5).
- 14. A method of selecting and screening products capable of inhibiting apoptosis comprising detecting inhibition of the capacity of the juxtamembrane domain located between positions 649 and 664 of the cytoplasmic domain of amyloid precursor protein to induce apototic activity subsequent to internalization into a cell.
- 15. The method of claim 14, wherein said peptide is combined with an internalization peptide selected from the group consisting of internalization peptides capable of crossing the blood-brain barrier.

Attorney Docket No.: 045636-5054 Application No.: Unassigned

- 16. A method of selecting and screening products capable of inhibiting apoptosis comprising detecting inhibition of the capacity of a peptide selected from the group consisting of $Y_1KQYTSIHHGY_0$ (SEQ ID NO: 2), $Y_1KKQYTSIHHGY_0$ (SEQ ID NO: 3) and $Y_1KKKQYTSIHHGY_0$ (SEQ ID NO: 4), in which Y_0 is null or represents V, VV, VVEVVEV or VVEVD and Y_1 is null or represents an internalization and addressing peptide corresponding to the sequence $X_1X_2X_3X_4X_5X_6X_7X_8X_9X_{10}X_{11}X_{12}X_{13}X_{14}X_{15}X_{16}$, in which $X_1,X_2,X_3,X_4,X_5,X_6,X_7,X_8,X_9,X_{10},X_{11},X_{12},X_{13},X_{14},X_{15}$ and X_{16} each represent an α -amino acid, 6 to 10 of said amino acids being hydrophobic and X_6 representing a tryptophan, to induce apototic activity subsequent to internalization into a cell.
- 17. The method of claim 16 wherein candidate inhibitors are tested against cells in which the claimed peptide has been internalized.
- 18. The method of claim 17 comprising the steps of:

bringing the potential inhibitor into contact with said cell into which said peptide has been internalized, and

either measuring cleavage of DNA or of actin or measuring the p20 subunit of caspase 3.



Attorney Docket No.: 045636-5054

Application No.: Unassigned

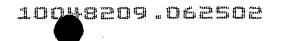
19. A method of treating cancer comprising the administration of an effective amount of a peptide of claim 12.

20. A peptide selected from the group of peptides Y₁KQYTSIHHGY₀ (SEQ ID NO:

2) and Y1KKQYTSIHHGY0 (SEQ ID NO: 3), in which Y0 is null or represents V, VV,

VVE VVEV or VVEVD and Y_1 is null, and of the peptide of formula

Y₁KKKQYTSIHHGY₀ (SEQ ID NO: 4), in which Y₀ represents VVEVD and Y₁ is null.



Attorney Docket No.: 045636-5054

Application No.: Unassigned

20. A peptide selected from the group consisting of peptides $Y_1KQYTSIHHGY_0$ (SEQ ID NO: 2) and $Y_1KKQYTSIHHGY_0$ (SEQ ID NO: 3), in which Y_0 is null or represents V, VV, VVE VVEV or VVEVD and Y_1 is null, and of the peptide of formula $Y_1KKKQYTSIHHGY_0$ (SEQ ID NO: 4), in which Y_0 represents VVEVD and Y_1 is null.

05-09-2001

- 18 -

FR000217

CLAIMS

- A peptide, characterized in that it is selected 1. group of the peptides defined by the 5 sequences (one-letter code): Y, KQYTSIHHGY, (SEQ ID 2), Y1KKQYTSIHHGY0 (SEQ ID NO: 3) Y, KKKQYTSIHHGY, (SEQ ID NO: 4), in which Y, is null or represents V, VV, VVE VVEV or VVEVD and Y, internalization represents an and addressing 10 peptide corresponding to the sequence $X_1X_2X_3X_4X_5X_6X_7X_8X_9X_{10}X_{11}X_{12}X_{13}X_{14}X_{15}X_{16}$ in which $X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}, X_{11}, X_{12}, X_{13}, X_{14}, X_{15}$ and X_{16} each represent an α -amino acid, 6 to 10 of said amino acids being hydrophobic and X_s representing a 15 tryptophan.
 - 2. The peptide as claimed in claim 1, characterized in that the sequence Y_1 corresponds to the sequence KQIKIWFQNRRMKWKK (SEQ ID NO: 5).

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- 3. The use of a peptide comprising the juxtamembrane domain located between positions 649 and 664 of the cytoplasmic domain of amyloid precursor protein, for selecting and screening products capable of inhibiting apoptosis.
- 4. The use as claimed in claim 3, characterized in that said peptide is combined with an internalization peptide selected from the group consisting of internalization peptides capable of crossing the blood-brain barrier.
- 5. The use of a peptide selected from the group of peptides defined by the sequences (one-letter code) Y₁KQYTSIHHGY₀ (SEQ ID NO: 2), Y₁KKQYTSIHHGY₀ (SEQ ID NO: 3) and Y₁KKKQYTSIHHGY₀ (SEQ ID NO: 4), in which Y₀ is null or represents V, VV, VVE VVEV or VVEVD and Y₁ is null or represents an AMENDED SHEET



05-09-2001 FR000217

> internalization and addressing peptide corresponding the to sequence which $X_1X_2X_3X_4X_5X_6X_7X_8X_9X_{10}X_{11}X_{12}X_{13}X_{14}X_{15}X_{16}$, in $X_{1}, X_{2}, X_{3}, X_{4}, X_{5}, X_{6}, X_{7}, X_{8}, X_{9}, X_{10}, X_{11}, X_{12}, X_{13}, X_{14}, X_{15}$ and X_{16} each represent an α -amino acid, 6 to 10 of said amino acids being hydrophobic and X6 representing a tryptophan, for selecting and screening products capable of inhibiting apoptosis.

- The use of cells, into which a peptide as defined 10 6. in claims 3 to 5 has been internalized, selecting and screening products capable inhibiting apoptosis.
- 15 7. A method for screening and selecting products capable of inhibiting apoptosis, characterized in that it comprises:
- bringing the potential inhibitor into contact with a cell into which a peptide as defined in claims 3 20 to 5 has been internalized, and
 - measuring cleavage of DNA or of actin or measuring the p20 subunit of caspase 3.

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- 8. The use of a peptide as defined in claims 3 to 5, for preparing an anticancer medicinal product.
- A peptide, characterized in that it is selected 9. 30 from the group of peptides defined sequences (one-letter code) Y1KQYTSIHHGY0 (SEQ ID NO: 2) and Y1KKQYTSIHHGY0 (SEQ ID NO: 3), in which Yo is null or represents V, VV, VVE VVEV or VVEVD and Y, is null, and of the peptide of formula Y1KKKQYTSIHHGY0 (SEQ ID NO: 4), in which Y0 35 represents VVEVD and Y_1 is null.